7. **(TWICE AMENDED)** The vector according to claim 1 wherein the polynucleotide comprises at least one tumor binding domain which binds with at least one tumor-associated cell surface molecule.

8. **(TWICE AMENDED)** The vector according to claim 7 wherein the tumor-associated cell surface molecule is selectively expressed on one cell type.

9. **(TWICE AMENDED)** The vector according to claim 1 wherein the vector delivers the second polynucleotide of interest to a selective tumor site.

12. **(TWICE AMENDED)** A vector according to claim 1 wherein the trophoblast cell surface antigen is the 5T4 antigen.

15. **(TWICE AMENDED)** The vector according to claim 1 wherein any nucleotide sequence selected from the group consisting of: the polynucleotide encoding the tumor-interacting protein, the second nucleotide sequence of interest, and both further comprises a polynucleotide sequence which encodes at least one additional functional component, wherein the additional functional component is selected from the group consisting of a signal peptide, an immune enhancer, a toxin and a biologically active enzyme.

16. **(TWICE AMENDED)** The vector according to claim 6 wherein any protein selected from the group consisting of: the tumor-interacting protein, the product of interest, and both, further comprises at least one additional functional component, wherein the additional functional component is selected from the group consisting of a signal peptide, an immune enhancer, a toxin and a biologically active enzyme.

18. **(TWICE AMENDED)** The vector according to claim 1 wherein the vector is a retroviral vector.

20. **(TWICE AMENDED)** A method of delivering a polynucleotide sequence of interest or a product of interest encoded by said polynucleotide of interest to a tumor, comprising delivering the polynucleotide of interest or product of interest to said tumor by use of the vector of claim 1.

24. **(TWICE AMENDED)** A method of treating cancer in a mammal, the method comprising delivering a polynucleotide of interest or a product of interest encoded by said polynucleotide of interest to a tumor, wherein the polynucleotide of interest or product of interest is delivered to the tumor by use of the vector according to claim 1.

27. **(TWICE AMENDED)** A gene delivery system for targeting one or more genes encoding a tumor-interacting protein to a tumor, wherein said gene delivery system comprises (i) a genetic vector encoding a tumor-interacting protein and (ii) an *in vivo* gene-delivery system, wherein said tumor interacting protein binds to a trophoblast cell surface antigen.

28. **(TWICE AMENDED)** A method of treating cancer comprising administering the gene delivery system of claim 27 to the site of a tumor.

29. **(TWICE AMENDED)** A method of treating cancer of cells of the haematopoietic cell lineage comprising administering the gene delivery system according to claim 27 to cancer cells.

31. **(TWICE AMENDED)** A genetic vector comprising a polynucleotide encoding a tumor-interacting protein, operably linked to an expression regulatory element selectively functional in a cell type present within a tumor mass, wherein said tumor interacting protein binds to a trophoblast cell surface antigen.

32. **(TWICE AMENDED)** The genetic vector of claim 31 wherein said tumor-interacting protein additionally comprises one or more effector domains selected from the group consisting of an enzyme, a pro-drug activating enzyme, a toxin, all or part of a cytokine, an effector domain of an immoglobulin heavy claim, a domain which activates macrophage FegR I, II or III receptors and a domain which confers protein stability *ex vivo* and or *in vivo*.

33. **(TWICE AMENDED)** A method of treating cancer in a mammal which comprises administering a combination of a cytokine or a cytokine-encoding gene and one or more genes encoding a tumor-interacting protein, wherein said tumor-interacting protein binds to a trophoblast cell surface antigen.

34. **(TWICE AMENDED)** A method of delivering a gene to a tumor comprising: delivering genes encoding tumor-interacting proteins directly to the tumor, wherein said genes are delivered using a vector according to claim 1.

36. **(TWICE AMENDED)** The vector of claim 14 wherein the fusion protein is secreted.

38. **(TWICE AMENDED)** A method for delivering a polynucleotide sequence to a second cell comprising using a vector according to claim 1 to deliver the polynucleotide to a first cell neighboring said second cell.

47. **(ONCE AMENDED)** The vector according to claim 6 wherein the vector delivers the product of interest to the interior of a tumor mass.

48. **(ONCE AMENDED)** The vector of claim 15 wherein the additional functional component is a signal peptide.

51. **(ONCE AMENDED)** The gene delivery system of claim 27 wherein the tumor-interacting protein is a tumor binding protein.

60. **(ONCE AMENDED)** The vector of claim 6 wherein the protein product of interest is therapeutic.

Please add claims 61-74 as follows:

61. A vector comprising a polynucleotide encoding a tumor-interacting protein wherein the tumor-interacting protein recognizes a tumor and wherein the vector delivers a second polynucleotide of interest to the tumor, wherein said polynucleotide and second polynucleotide of interest are expressed as a fusion protein.

62. The vector according to claim 61 wherein the fusion protein is secreted.

63. A vector comprising a polynucleotide encoding a tumor-interacting protein wherein the tumor-interacting protein recognizes a tumor and wherein the vector delivers a second polynucleotide of interest to the tumor, wherein the second polynucleotide of interest encodes a protein product of interest and said tumor interacting protein and product of interest are expressed as a fusion protein.

64. The vector according to claim 63 wherein the fusion protein is secreted.

65. A vector comprising a polynucleotide encoding a tumor-interacting protein wherein the tumor-interacting protein recognizes a tumor and wherein the vector delivers a second polynucleotide of interest to the tumor, wherein the vector is a retroviral vector.

66. The vector according to claim 65 wherein the retroviral vector comprises a tumor-specific promoter enhancer.

67. A method of delivering a polynucleotide of interest or a product of interest encoded by said polynucleotide of interest to a tumor, comprising delivering the polynucleotide of interest or product of interest to said tumor by use of a vector comprising a polynucleotide encoding a tumor-interacting protein wherein the tumor-interacting protein recognizes a tumor and wherein the vector delivers the polynucleotide of interest and the product of interest *ex vivo* to the tumor.

68. A method of treating cancer in a mammal, the method comprising delivering a polynucleotide of interest or a product of interest encoded by said polynucleotide of interest to a tumor, wherein the polynucleotide of interest or product of interest is delivered to the tumor by

use of a vector comprising a polynucleotide encoding a tumor-interacting protein wherein the tumor-interacting protein recognizes a tumor and wherein the vector delivers the polynucleotide of interest *ex vivo* to the tumor.

69. A method of treating cancer cells of the haematopoietic cell lineage comprising administering to cancer cells a gene delivery system comprising a vector comprising a polynucleotide encoding a tumor-interacting protein wherein the tumor-interacting protein recognizes a tumor and wherein the vector delivers the polynucleotide of interest to the cancer cells.

70. A method for delivering a polynucleotide sequence to a second cell neighbouring a first cell comprising using a vector to deliver the polynucleotide to said first cell, wherein said vector comprises a polynucleotide encoding a tumor-interacting protein wherein the tumor-interacting protein recognizes a tumor and wherein the vector delivers a second polynucleotide of interest to the tumor.

71. A vector comprising a polynucleotide encoding a tumor-interacting protein wherein the tumor-interacting protein recognizes a tumor and wherein the vector delivers a second polynucleotide of interest to the tumor, wherein any nucleotide sequence selected from the group consisting of the polynucleotide encoding the tumor-interacting protein, the second nucleotide sequence of interest, and both, further comprises a polynucleotide sequence which encodes a signal peptide.

72. A vector comprising a polynucleotide encoding a tumor-interacting protein wherein the tumor-interacting protein recognizes a tumor and wherein the vector delivers a second polynucleotide of interest to the tumor, wherein any protein selected from the group consisting of the tumor-interacting protein, the protein of interest, and both further comprises a signal peptide.

73. A method of treating cancer in a mammal which comprises administering a combination of a cytokine or a cytokine-encoding gene and one or more genes encoding a tumor-interacting protein.

74. The method of claim 73 wherein the tumor-interacting protein is a tumor binding protein.

REMARKS